

AMENDMENT:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer to the claimed and/or disclosed subject matter, and the assignee reserves the right to claim this subject matter and/or other disclosed subject matter in a continuing application.

Claim Listing:

Claim 1 (Currently Amended). A method of sequencing ~~[[the]] image data inside the memory unit of an optical scanning device, wherein the method is particularly suitable for scanning a line containing a plurality of pixels, wherein each pixel comprises a plurality of primary or secondary colors, the image data sequencing method comprising the steps of:~~

scanning a line to obtain ~~all the~~ pixel data for one of ~~[[the]]~~ a plurality of primary or secondary colors;

dividing the scanned data into a first group containing ~~all the~~ odd-numbered pixel data and a second group containing ~~all the~~ even-numbered pixel data; and

sending the first group of pixel data or the second group of pixel data to ~~[[the]]~~ a memory unit and reserving a storage space ~~[[both]]~~ in front of and behind ~~the retrieved~~ an address space for the sent pixel data ~~primary or secondary color address space so that all the~~ primary or secondary color data constituting a pixel can be arranged in a fixed sequence next to each other inside ~~[[the]]~~ said memory unit.; and

~~submitting the pixel data of the primary or secondary colors after a full set of the primary or secondary colors belonging either to the first group or the second group is accumulated inside the memory unit, wherein the primary colors include red, green and blue; and wherein the secondary colors include magenta, yellow and cyan.~~

Claim 2 (Currently Amended). A method of sequencing data ~~inside the memory unit of an optical scanning device, comprising the steps of:~~

dividing ~~[[the]]~~ data obtained by scanning a line of pixels into groups;

~~[[and]]~~ sending ~~[[the]]~~ said data to ~~[[the]]~~ a memory unit;

arranging a plurality of primary or secondary color data constituting a pixel in a fixed sequence
in said memory unit; and

sending out ~~all the pixel~~ the data belonging to ~~[[a]]~~ one of the group groups after ~~[[the]]~~ said
memory unit has accumulated ~~[[all]]~~ the pixel data of ~~[[the]]~~ said one of the groups ~~group and the data~~
~~of all primary or secondary colors constituting each pixel arranged in a fixed sequence inside the~~
~~memory unit.~~

Claim 3 (Currently Amended). The ~~sequencing method of claim 2, wherein the step of dividing the scanned data into groups~~ comprises ~~includes the sub-steps of:~~

gathering ~~all the odd-numbered pixel data together to form a~~ first group; and

gathering ~~all the even-numbered pixel data together to form another~~ a second group.

Claim 4 (Currently Amended). The ~~sequencing method of claim 2, wherein the primary colors include~~
comprise red, green and blue and wherein the secondary colors ~~include~~ comprise magenta, yellow and
cyan.

Claim 5 (Currently Amended). The ~~sequencing method of claim 2, wherein the step of storing a group of data inside~~ sending said data to the memory unit further comprises ~~includes the sub-steps of:~~

securing ~~all the pixel data of one primary or secondary color; and~~

reserving a storage space ~~[[both]]~~ before and after an address space associated with said pixel
data ~~the secured primary or secondary color data address space,~~ so that ~~[[all]]~~ the primary or
secondary colors constituting a pixel ~~[[are]]~~ can be arranged in a fixed sequence ~~next to each other~~
within ~~[[the]]~~ said memory unit.

Claim 6 (Currently Amended). A method of sequencing ~~[[the]]~~ image data ~~inside the memory unit of an optical scanning device, wherein the method is particularly suitable for scanning a line of pixels with each pixel comprising a plurality of primary or secondary colors, the image data sequencing method comprising the steps of:~~

securing ~~all the~~ pixel data from ~~[[the]]~~ a scan line, said pixel data corresponding to belonging to ~~[[one]]~~ a primary or secondary color;

dividing ~~[[the]]~~ pixels of the scanned line into groups;

reserving a storage space ~~[[both]]~~ before and after ~~[[the]]~~ an address space for holding the secured primary or secondary color data so that ~~[[all]]~~ the primary or secondary colors constituting a pixel ~~[[are]]~~ can be arranged in a fixed sequence ~~next to each other within the memory unit; and~~

sending out the pixel data of the primary or secondary colors after a ~~[[full]]~~ set of the primary or secondary colors belonging to one of the groups is accumulated inside the memory unit.

Clam 7 (Currently Amended). The ~~sequencing method of claim 6, wherein the step of dividing pixels of the scanned line into groups comprises the scanned data into groups includes the sub steps of:~~

gathering ~~[[all]]~~ the odd-numbered pixel data together to form a first group; and

gathering ~~[[all]]~~ the even-numbered pixel data together to form ~~another~~ a second group.

Claim 8 (Currently Amended). The ~~sequencing method of claim 6, wherein the primary colors include~~ comprise red, green and blue, and wherein the secondary colors ~~include~~ comprise magenta, yellow and cyan.

Claim 9 (New). The method of claim 1, and further comprising transmitting said pixel data of the primary or secondary colors after a set of the primary or secondary colors belonging either to the first group or the second group is accumulated inside said memory unit.

Claim 10 (New). The method of claim 9, wherein the primary colors comprise red, green and blue, and wherein the secondary colors comprise magenta, yellow and cyan.

Claim 11 (New). The method of claim 5, wherein the primary or secondary colors constituting a pixel can be arranged next to each other in said fixed sequence.

Claim 12 (New). The method of claim 6, wherein the primary or secondary colors constituting a pixel can be arranged next to each other in said fixed sequence.

Claim 13 (New). An apparatus comprising:

a scanner having a configuration to store pixel data belonging to a first group and/or a second group in a memory unit at a first address space, wherein an address space before and after the first address space can be reserved so that a plurality of pixel data corresponding to a pixel can be arranged in a sequence inside said memory unit, wherein said pixel data comprises primary and/or secondary color data associated with said pixel.

Claim 14 (New). The apparatus of claim 13, wherein said first group comprises even-numbered pixels, and wherein said second group comprises odd-numbered pixels.

Claim 15 (New). The apparatus of claim 14, wherein primary colors comprise red, blue, and green, and wherein secondary colors comprise magenta, yellow, and cyan.

Claim 16 (New) The apparatus of claim 15, wherein said scanner further has a configuration to transmit pixel data once a plurality of pixel data from said first group and/or said second group is stored in said memory unit.